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## **DETAILED ACTION**

## Response to Arguments

1. Applicants' amendments and arguments, filed on 01/31/2008, with respect to Claims 1 and 11 have been fully considered. The 35U.S.C. 103(a) rejections has been withdrawn.

#### **Examiner Amendments**

- 2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.
- 3. Authorization for this examiner's amendment was given in a telephone interview with Applicant's representative Michael Murphy on 4/28/2008.
- 4. The application has been amended as follows:

In the claims:

- The original filed Claim 22 indicated as allowable in the previous office actions was missing from the amendment, dated 2/28/2007. Place the missing original filed claim 22 to the claim list as following---
  - 22. (original) The method of claim 16, wherein said Euclidian distances are calculated as the square root of the summation over the length of said known bit pattern of the square of the difference between said converted known bit and said demodulated soft bit. ---

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# Allowable Subject Matter

5. Claims 1-6 and 8-22 are allowed.

6. The following is an examiner's statement of reasons for allowance.

The prior art fails to teach an apparatus of Claims 1, 12 and 16 that specifically comprises the following:

-- The instant application is deemed to be directed to a non-obvious improvement over the admitted prior art of the instant application and the invention patented in Pat. No. US 5,710,772 and US 6,286,122 and US 7,024,193.

The improvement comprises:

With regard Claim 1, " a received data frame as being a Discontinuous Transmission (DTX) high or low class, each of said classes having a corresponding format wherein a known bit pattern is located in a different respective position within said data frame, computing a first value representing a confidence-weighted correlation between said known bit pattern and data from a first position of said frame" as recited in combination with other limitation in claim x).

With regard Claims 12 and 16 as recited in combination with other limitation in claim The following is a statement of reasons for the indication of allowable subject matter: the prior art fails to teach and suggest a method of classifying a received data frame as belonging to one of a plurality of possible classes, comprising determining D1, D2 and

calculating the ration R steps and classifying the received data frame as being in the format wherein said known bit pattern occupies said first or second position based on the comparison result of the ratio R and threshold value T as recited in claims 12 and 16, respectively.

7. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ted M. Wang whose telephone number is (571) 272-3053. The examiner can normally be reached on M-F, 7:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chieh Fan can be reached on 571-272-3042. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

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you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at (866) 217-9197 (toll-free).

/Ted M Wang/ Primary Examiner, Art Unit 2611